AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented): Blade crusher, comprising means for crushing along a first plane combined with means for shearing in a second plane perpendicular to the first plane and means for shearing in a third plane parallel to the first plane.

2. (Currently amended): Crusher according to Claim 1, wherein ~~the orthogonal planes are vertical and horizontal planes~~ the perpendicular planes are horizontal and vertical planes, respectively.

3. (Previously presented): Crusher combining a crushing action with a double shearing action in two orthogonal planes, said crusher comprising:

at least two successive pairs of movable toothed blades forming jaws, each pair consisting of two opposite corresponding toothed blades driven in a reciprocating motion moving them apart and bringing them together in a plane so as to abut against one another when the teeth engage in one another, so as to provide a crushing action,

at least part of the teeth of the blades possessing a face oriented perpendicularly to the plane of the reciprocating motion of the blades, so as to provide a shearing action in a plane perpendicular to the plane of the reciprocating motion of the blades, and

the second pair of blades sliding against the first pair of blades so as to come into abutment in a position offset with respect to the abutment position of the first pair of toothed blades, so as to provide a shearing action in a plane parallel to the plane of the reciprocating motion of the blades.

4. (Previously presented): Crusher according to Claim 3, wherein the blades constituting the pairs of blades are in a vertical position and have teeth possessing, at least in part, horizontal surfaces oriented respectively upwards and downwards, so that the double shearing action is due to a vertical shearing action produced by the crossing of the successive blades sliding against one another, combined with a horizontal shearing action produced by the crossing of the faces of the teeth oriented respectively upwards and downwards, sliding against one another.

5. (Previously presented): Crusher according to Claim 4, wherein the blades extend upwards by way of upper zones, which are likewise toothed, but which do not engage in one another, adopting in contrast a V-shaped geometric position forming a hopper when the toothed blades are engaged in one another in the lower abutment zone.

6. (Previously presented): Crusher according to Claim 4, wherein, in the abutment zone, the toothed blades constituting the pairs are oblique.

7. (Previously presented): Crusher according to Claim 4, wherein, in the abutment zone, the toothed blades constituting the pairs possess a curved profile.

8. (Previously presented): Crusher according to Claim 3, wherein fixed blades are interposed between the movable blades.

9. (Previously presented): Crusher according to Claim 4, wherein at least one of the blades comprises in the lower part a cutout forming a free space in which the teeth of the opposite blade do not come into abutment.

10. (Previously presented): Crusher according to Claim 4, wherein at least one of the blades comprises in the lower part and at the extremity another cutout which cooperates with a nose or nib projecting concordantly on the opposite blade.

11. (Previously presented): Crusher according to Claim 3, wherein the blades are brought together and moved apart on a linear path situated in the same plane, or in two planes forming between them an obtuse angle other than 180°, the converging motion in this case being oblique.

12. (Previously presented): Crusher according to Claim 3, wherein the blades are brought together and moved apart on a curvilinear or arcuate path.

13. (Previously presented): Crusher according to Claim 3, which is in modular form, it being possible to add pairs of toothed blades alongside existing blades to increase the crushing capacity, or remove them to reduce the capacity, weight and space taken up.

14. (Previously presented): Multi-stage crushing assembly, comprising a plurality of crushers ~~according to Claim 1~~ installed in series, wherein the crushed material obtained by one crusher feeds the following crusher of the series, each of the crushers comprising means for crushing along a first plane combined with means for shearing in a second plane perpendicular to the first plane and means for shearing in a third plane parallel to the first plane.

15. (Currently amended): Medical waste-sterilising installation, which comprises, as a unit placed upstream of a microwave sterilising apparatus, a crusher according to Claim 1 ~~or a plurality of crushers according to Claim 1 installed in series, wherein the crushed material obtained by one crusher feeds the following crusher of the series~~.

16. (Previously presented): Crusher according to claim 5 wherein, in the abutment zone, the toothed blades constituting the pairs are oblique.

17. (Previously presented): Crusher according to claim 5, wherein, in the abutment zone, the toothed blades constituting the pairs possess a curved profile.

18. (Previously presented): Crusher according to claim 6, wherein, in the abutment zone,

the toothed blades constituting the pairs possess a curved profile.

19. (Previously presented): Crusher according to claim 7, wherein the curved profile is an S-shaped profile.

20. (Previously presented): Crusher according to claim 17, wherein the curved profile is an S-shaped profile.

21. (Previously presented): Crusher according to claim 18, wherein the curved profile is an S-shaped profile.

22. (Currently amended): Multi-stage crushing assembly, comprising a plurality of crushers ~~according to Claim 3~~ installed in series, wherein the crushed material obtained by one crusher feeds the following crusher of the series, each of the crushers combining a crushing action with a double shearing action in two orthogonal planes, and each of the crushers comprising:

at least two successive pairs of movable toothed blades forming jaws, each pair consisting of two opposite corresponding toothed blades driven in a reciprocating motion moving them apart and bringing them together in a plane so as to abut against one another when the teeth engage in one another, so as to provide a crushing action,

at least part of the teeth of the blades possessing a face oriented perpendicularly to the plane of the reciprocating motion of the blades, so as to provide a shearing action in a plane perpendicular to the plane of the reciprocating motion of the blades, and

the second pair of blades sliding against the first pair of blades so as to come into abutment in a position offset with respect to the abutment position of the first pair of toothed blades, so as to provide a shearing action in a plane parallel to the plane of the reciprocating motion of the blades.

23. (Currently amended): Medical waste-sterilising installation, which comprises, as a unit

placed upstream of a microwave sterilising apparatus, a crusher according to Claim 3 ~~or a plurality of crushers according to Claim 3 installed in series, wherein the crushed material obtained by one crusher feeds the following crusher of the series~~.

24. (Previously presented): Crusher according to claim 3, wherein the shearing action in the plane perpendicular to the plane of the reciprocating motion of the blades is due to tooth faces sliding against one another.

25. (New): Medical waste-sterilising installation, which comprises, as a unit placed upstream of a microwave sterilising apparatus, a plurality of crushers installed in series, wherein the crushed material obtained by one crusher feeds the following crusher of the series, each of the crushers comprising means for crushing along a first plane combined with means for shearing in a second plane perpendicular to the first plane and means for shearing in a third plane parallel to the first plane.

26. (New): Medical waste-sterilising installation, which comprises, as a unit placed upstream of a microwave sterilising apparatus, a plurality of crushers installed in series, wherein the crushed material obtained by one crusher feeds the following crusher of the series, each of the crushers combining a crushing action with a double shearing action in two orthogonal planes, and each of the crushers comprising:

at least two successive pairs of movable toothed blades forming jaws, each pair consisting of two opposite corresponding toothed blades driven in a reciprocating motion moving them apart and bringing them together in a plane so as to abut against one another when the teeth engage in one another, so as to provide a crushing action,

at least part of the teeth of the blades possessing a face oriented perpendicularly to the plane of the reciprocating motion of the blades, so as to provide a shearing action in a plane perpendicular to the plane of the reciprocating motion of the blades, and

the second pair of blades sliding against the first pair of blades so as to come into abutment in a position offset with respect to the abutment position of the first pair of toothed blades, so as to provide a shearing action in a plane parallel to the plane of the reciprocating motion of the blades.